

SWIFT AS A CHANNEL

October 30, 2000

1/ EXECUTIVE SUMMARY

FINDINGS: PART 1

SWIFT should have more focus from SCB. Corporate & Institutional Banking should work actively together with SWIFT with their Internet initiative; standards development and join SWIFT alliances to improve our multi channel ability - e.g. Identrus|.

- **SWIFT will probably evolve into the method of choice in the “Internet Economy” for Banks and their Corporates for multi channel funds transfer.**
- **In Electronic Business, Business to Consumer (B2C) at the moment, the credit card payment, with the SSL protocol, is the most widely adopted.**
- **Business to Business (B2B) occupies the major portion of Electronic Business.**
- **B2B needs more economical and secure payment methods.**
- **SWIFT has realized the implications of the Internet economy and is increasingly developing their own SWIFT Internet offering.**

- **The Internet based funds transfer system being proposed by SWIFT will become the major medium for large amount transfer**
- **SWIFT will evolve to using the Internet as their predominant method of funds transfer.**
- **To address Internet security, SWIFT and Identrus -a firm of 35 large banks - now offer a secure Internet payment service. SCB should join Identrus.**
- **Channel Management focus should emphasize SWIFT as the future major (predominant?) channel for funds transfer using the Internet, and start making plans accordingly.**
- **SWIFT will be given the status of a separate channel in SCB C&IB similar to Proprietary, Fax, and Host-to-Host and the others. This will give us more focus on SWIFT at this critical juncture both for us and for SWIFT.**
- **Channel Management is the area for this SWIFT internal/external in initiative. A person who works in Channel Management will be dedicated to coordinate the many disparate SWIFT activities now underway in the Bank.**
- **Channel Management SCB will work with SWIFT with the development of new Internet compatible SWIFT standards, champion the Identrus initiative within the Bank and generally be the SWIFT focus within SCB C&IB.**

2/ PURPOSE

Channel Management has been asked by senior management to initiate review of branch and operations counter use and costs & initiate review of SWIFT¹ use and costs

This Part I is a review of the use

¹ The term SWIFT will be used as abbreviation for the Society of Worldwide Inter-Bank Financial Telecommunications -rather than cumbersome S.W.I.F.T. or Swift

- a) Setting the scene as to exact what SWIFT is, what it does and the different components of SWIFT**
- b) Looking at how SWIFT can fit into the overall channel portfolio**
- c) Whether there is need for SWIFT to be managed as a channel.**

Part 2 is the cost aspects - and this part of the Study will be done with Business Finance as a next step - delivery mid November for Part 2

3/ OBJECTIVE

From a channel perspective SCB has to be able to sell to the right customer, using the right channel at the right cost.

4/ METHODOLOGY

This Review is being carried out in two parts as follows:

- **Part 1: end of September 2000**
 - An understanding of the overall existing process flow within SCB for SWIFT.
 - An understanding were SWIFT is moving in the future and why.
 - In conjunction with Business Finance conduct an evaluation of SWIFT costing
 - Preliminary Recommendations for SCB C&IB's participation with SWIFT.
- **Part 2: end of October 2000**
 - Final Recommendations on Financial Costing of SWIFT as a channel including counter /message center costs based on the Business Finance Study.²**

² The Service Delivery is scheduled for completion the end of November 2000

5/ BACKGROUND

There is a Study underway by Business Finance (BF) which includes SWIFT and other costs and how they impact the provision of our products.³ This BF Study is not covered in this report. When the PP results are available, their conclusions and findings will be incorporated. (*See Annex A*)

There numerous other SWIFT Studies underway – the various studies and projects coordinated with to the extent possible to avoid duplication.

6/ DISCUSSION

A/ Various SWIFT Studies Underway

There is, in the Product Profitability (PP) Project of Business Finance C&IB, a good definition of Channel management: “ *The process of making a product or service available for use or consumption by the consumer or business*”⁴. The definitions and costing model are the same used in the PP Study being headed by Scott Spanton ⁵ See Annex D.

The objective of the Product Profitability Study of Business Finance is to demonstrate the channel and processing costs of each product. The Product Profitability Project costing model will show the cost of making a product or service available to the customer and the cost associated with the execution of the product or service.⁶

³ The list of channels as agreed in the SWIFT Co-ordination Meeting of 28 Sept are :

1. CB branches ;2. Counter at CMS; 3. Courier; 4. Fax ; 5. Proprietary workstation 6, Internet
7. Host-to-host 8.; SWIFT 9.; MEPS ; 10. ACH per Email Lotus Lim Suet Hoon of 28 Sept 2000

⁴ The E-business Revolution by Daniel Amor HP Books Page 37 Published NY 2000

⁵ Scott Spanton’s Paper dated 06/09/00

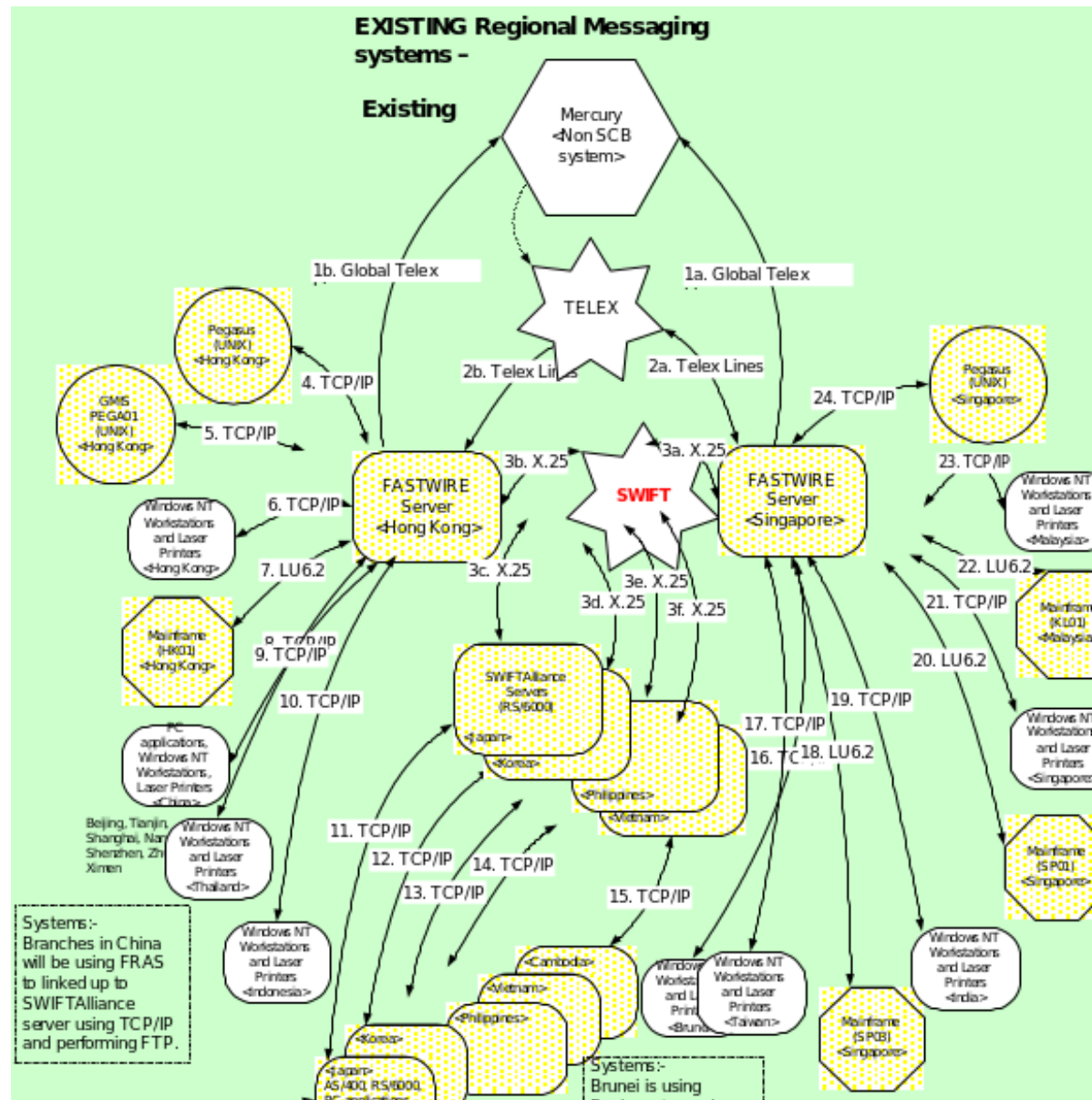
⁶ *ibid*

There is a Service Delivery Project on SWIFT. The Objective of the Service Delivery Project on the same subject is to maximize our eChannel Delivery capability to step up productivity and throughput, reduce unit processing cost and free up capacity for higher volumes. This requires deeper penetration of selected eChannels into our customer base, increasing customer utilization of these channels for initiating cash transactions and fully exploiting straight through processing opportunities. It is intended that the Product Cost Model will be enhanced to reflect Channel Cost – the processing cost of transactions initiated through the different channels available to each product.

Peter Churchman of Product Management is working also on a Study on the viability of creating a single message center to replace the current Hong Kong/Singapore/Malaysia setup.⁷

B/ Existing Regional Messaging Using SWIFT Process: see chart next page

⁷ Peter Churchman per Email Lotus Notes 10 October 2000



- **SWIFT**

There is no feasibility alternative to SWIFT at this point in time for the manner SCB conducts business with groups specifically in respect to Financial Institutions and payments made to and received from these institutions. SCB is now working with SWIFT with the ISO 15002 message types, which will form an integral part of the major GSTPA initiative. All custodial and payment banks will continue to use SWIFT for custody and payments.

Once a custody or payment transaction reaches the back office of the financial institution they will continue to be SWIFT. SWIFT will continue to be the major channel not only for SCB but also for all financial institutions.

- **SCB Counters / Message Centers**

There are no corporate counters for C&IB: the Consumer Bank through SCB branches n handles all Cash deposits for corporate clients. The only exceptions are Vietnam, Cambodia, Korea and Japan, where we do not conduct Consumer Banking activities.

The same process is utilized for both Corporate and Consumer clients: a paying-in slip is completed, handed to the teller with the Cash, who counts the money, and if correct, inputs through the counter terminal to the host computer system. This can be HOGAN, MIDAS, Bankmaster or Branch Banking System (MESA countries only).

Charges for handling are not by transaction but a cross-charge to C&IB for Consumer efforts. The basis of the charging is a 75% Consumer to 25% C&IB split. This system has been in effect since 1995 and is now being reassessed by Business Finance

A generic flow chart – or as close to generic as possible process – as no two are the same – is shown at ANNEX E, F and G. ⁸. That no two areas are the same will have an impact on the cost base analysis by Business Finance – each Hogan area is doing it differently. What is found in the cost base for channel

⁸ Please note this is not meant to be Asia centric – the examples just “happen” to be Hong Kong and Singapore. Also what is true for Hong Kong or Singapore is not generic across the Bank – the process is different, for example, in London, MESA.

will be important. The message centers are allocating costs in a differently in various areas of the Bank – the viability of creating a single message center to replace the current HK/Sg ?My setup is now being studied by Peter Churchman.

Some of the current SWIFT process and or SCB process that interface with SWIFT are:

- **SWIFT FIN** is SWIFT's existing store-and-forward messaging - allows Financial Institutions such as SCB to exchange standardized financial messages worldwide. FIN is a "mature " product, and offers standardized financial telecommunications across all markets through packet, store and forward using X25 – a 1980 era technology. However, SWIFTFIN is the only SWIFT network/communications currently in use in the Bank.
- **Fastwire** is a package from the vendor Logica running on a Dec Vax machine. It is the SWIFT gateway just like SWIFTAlliance in other Asian Network countries such as Japan, Korea, etc. For the Bank's current SWIFT interface in Asia, Fastwire, there is a proposition for Fastwire to be replaced by SWIFT Alliance. This proposition is in the early stages of consideration . The business case is certainly not complete - there is a hardware issue certainly, but the case also hinges on making the platform SWIFT Next Generation ready. A business rationale has not been given at this point as to why it would be desirable to be 'Next Generation' ready. ⁹
- **GAMX** is an in-house developed mainframe application. Historically, all applications resided on mainframe; therefore GAMX was developed as the single point of connection between mainframe and Fastwire.
- There is **no firewall** between Fastwire and the outside world. All messages are encrypted using proprietary logarithm provided by Fastwire.¹⁰

C/ SWIFT Changes Underway

⁹ Peter Churchman per Email Lotus Notes 10 October 2000

¹⁰ per Edwin So Lotus Notes Email of 22 Sept 00

Swift has built up since 1973 an extensive network of banks sharing worldwide data processing and communications links and a common language for international financial transactions. SWIFT has, albeit a bit late started to enter the Internet economy.

There are a number of small internet initiatives in this area – they would appear to be an improvement of the existing products /systems rather than a substantive move into the Internet.

- **SWIFTNet**

SWIFTNet is the next generation infrastructure developed by SWIFT. It shifts from X.25 to IP protocol and supports more than just messages in standard SWIFT format. SWIFT as a highly secure, extremely reliable IP has designed SWIFTNet IP Network to support SWIFT's new generation of products and services.

SWIFTNet is not yet in use anywhere within the SWIFT system. The first place it will be rolled out is in the link with the CLS Bank and the CLS Settlement Member banks.

SWIFT FIN will still be around for a few years yet (some quote at least 5 years), while SWIFTNet will roll out slowly next year. SWIFT Net is meant for interactive real-time messaging, as distinct from FIN which is a packet based store and forward system.¹¹ SWIFTNet services that support the real-time financial operations of our customers are SWIFTNet InterAct, which is for the exchange of query/response messages, and SWIFTNet FileAct, which is used for the exchange of large volumes of data.

- **SWIFT Alliance**

SWIFT Alliance is SWIFT's brand name for the range of interface products to connect to the SWIFT services. There are at least seven new products with more to be introduced. SWIFT Alliance is SWIFT's response to provide a range of turnkey interfaces providing network access to SWIFTNet.¹²

Per Edwin So the plan is to replace Fastwire by Swift Alliance. SCB are now working to build the business case and define the operation models. Edwin says SCB aims to kick-off the project this year if

¹¹ <http://www.swift.com>

¹² *ibid*

the PAR approval received. **If** we got the PAR approved this year, the Vax machine will be replaced around Q3 2001 for all the core market country hubs i.e. HK & SG.¹³

D/ the “Internet SWIFT”

There are other SWIFT Internet developments:

- **Internet Security & Identrus :**

The decision has been made and announced at this year’s SIBOS (Sept 2000) for SWIFT to have the ability to convert existing messages for the Internet. To do this SWIFT will need a certification capability. SWIFT, realizing this, has decided to accomplish this by setting up an alliance with a company called **Identrus**.

Identrus has created a worldwide **Identity Trust service** delivered via banks and financial institutions that **certify** their corporate customers as trusted trading partners on the Internet under uniform rules, contracts and business practices.¹⁴

Identrus provides a global framework for the provision of certificate authority services. Identrus also enables financial institutions to extend their full range of practices onto the Internet and become trusted third parties for e-commerce transactions.

According to the Swift Web page: Identrus is an e-trust market infrastructure set up as a for-profit LLC company. It was created and is owned by the world’s largest banks.

E/ Message Centers

As mentioned, once completed, the PP Project recommendations and findings will be incorporate the analysis of channel costs. The analysis of channel costs will only be possible once the Scott Spanton PP Study is completed.

- **Message Charging**

¹³ Per Edwin So Email of 21 Sept 00

¹⁴ SWIFT Annual Report 1999

The SCB SWIFT charging quoted by SCB Operations is between 22 to 30 cents per message. The sample of a standard sample charge, per the SWIFT Price & Invoice Handbook quoted charge by SWIFT¹⁵ is of USD 6.5 to 10.25 cents per 100 messages. Even taking the difference in the two currencies the difference is very high. The costs of the SWIFT software licenses? The answer is probably that this is an internal cost long established by SCB taking into account our SCB costs.

- **No currency/No amounts**

The global figure readily available from SWIFT relates to the volume amount of SWIFT transactions. SWIFT does not provide for analysis the amount of dollars they transferred. There would appear to be no way to ascertain the actual dollar quantity processed either over the counter at SCB or through SWIFT.

7/ CONCLUSION

The Internet based funds transfer system being proposed by SWIFT will become the major medium for large amount transfer.

SWIFT is a combination of a network/communication channel (e.g. SWIFTNet) and message standards. (E.g. SWIFT 100, 202 etc). SWIFT will probably evolve into the method of choice in the "Internet Economy" for Banks and their Corporates for funds transfer. In Electronic Business, Business to Consumer (B2C) at the moment, the credit card payment, with the SSL protocol, is the most widely adopted.

SWIFT is both a Channel and not a Channel - depending on where it is used in the process. It is important that this position is fully acknowledged and reflected in any arrangement going forward, otherwise we may lose focus in the process.¹⁶

¹⁵ SWIFT USER Handbook January 1999 page 13

¹⁶ **John Dick**, Product Manager, UK Clearing Services, C&IB SCB, London
England

Business to Business (B2B) occupies the major portion of Electronic Business. B2B needs more economical and secure payment methods. SWIFT has realized the implications of the Internet economy and is increasingly developing their own SWIFT Internet offering.

The Internet based funds transfer system being proposed by SWIFT will become the major medium for large amount transfer. SWIFT will evolve to using the Internet as their predominant method of funds transfer.

To address Internet security, SWIFT and Identrus -a firm of 35 large banks - now offer a secure Internet payment service. Channel Management focus should emphasize SWIFT as the future major (predominant?) channel for funds transfer using the Internet, and start making plans accordingly.

To start SWIFT should be given the status of a separate channel in SCB C&IB similar to Proprietary, Fax, and Host-to-Host and the others. This will give us more focus on SWIFT at this critical juncture both for us and for SWIFT.

Channel Management should be the area for this SWIFT internal/external in initiative. A person who works in Channel Management should be dedicated to coordinate the many disparate SWIFT activities now underway in the Bank. SCB C&IB should work actively together with SWIFT with their Internet initiative - particularly in the development of new SWIFT XML standards. The first initiative of this person or persons in Channel will be to work with SWIFT in the development of these new Internet compatible standards. Channel will also be the champion for such initiatives within the Bank of Identrus.

Channel C&IB will generally be the focus for all Internet SWIFT initiatives within C&IB.



**Corporate & Institutional Banking
Product Profitability**

ANNEX A

Introduction

The purpose of this paper is to discuss the requirements of the Product costing model within Product Profitability (PP).

Background

With the assistance of Product Managers, Service Delivery has established costing models for all Cash and Trade products. These models are being reviewed by PP with the view of adopting them as the cost model for PP.

Objective

The objective for Product Profitability is to demonstrate the channel and processing costs of each product. The PP costing model should show the cost of making a product or service available to the customer and the cost associated with the execution of the product or service.

Product Costs

There are four cost categories within C&IB - Service Delivery, Sales, Central Support and allocated Head Office costs. This report will focus on just Service Delivery costs, which make up 40% of C&IB direct costs.

The costs of Service Delivery can be divided into two categories:

Channel Costs

Processing Costs

What is a Channel?

“The process of making a product or service available for the use or consumption by the consumer or a business” - The E-Business (R)evolution by Daniel Amor

Example of our Channels:

Proprietary systems: NPS, IPS, EBSW2, Vista

Branches: Consumer Bank network

Swift: OTT, ITT

Paper: Fax, mail, telephone

Host to Host: Direct link with the customer back office

Internet: PSB reporting

Channel costs are the cost associated with building and maintaining a particular channel at a certain capacity.

Example of Channel costs:

CB recharge (an element of these costs may be processing)

GT costs (an element of these costs may be processing)

IS a cost (an element of these costs may be processing)

EB costs

MC costs (an element of these costs may be processing)

These costs are semi-fixed in nature and are only materially impacted by volumes when a certain capacity is exceeded.

What is Processing?

“A series of operations used in making or manufacturing something” - The Oxford dictionary

Example of Processing:

Payments
Information and Collection Products
Customer Service Centre

Processing costs are the cost associated with the execution of the product or service.

Example of Processing costs:

Direct service delivery associated with the Payments, ICP and CSC teams (Staff, Premises, and Equipment)
These costs are semi-variable in nature and are more volume related.

Review of the current Costing Models

The existing cost models appear to provide a good framework for Product Profitability. The allocation of direct costs is based on unit processing time and is related to volumes. The allocation of recharged costs is based on either specific product costs or an allocation method based on revenue or recommendations from PM.

There are some elements of the model that need enhancing to demonstrate the cost of each channel against each product. Also there are a couple of other issues which need clarifying. These issues include:

1. To identify the total cost of each channel.
2. A review of the allocation method of channel costs to products.
3. The inclusion of Message Centre as a channel.
4. A review of the allocation of Customer Service Centre to products.
5. The allocation of “recharge out” costs to products.

Conclusion

The purpose of this paper is a discussion document for PP, Service Delivery and Channel Management. The feedback from SD and CM to the above will be used by Product Profitability in developing a solution for Product costing.

Scott Spanton Senior Analyst Business Finance C&IB

ANNEX B PEOPLE and SOURCES

- 1/ **Scott Spanton**, Senior Business Analyst, Business Finance, Singapore
- 2/ **Ron Chakravati**, Senior Product Manager, Cash Management Services, C&IB, Singapore.
- 3/ **Lim Suet Hoon**, Senior Manager, Network Management Team, Group Service Delivery
Singapore
- 4/ **Rob Edwards**, Head Cash Management & Custody Services, C&IB, Singapore
- 5/ **Edwin So**, Senior IS Manager, C&IB, Hong Kong
- 6/ **Anne Loi**, Manager, Message Centre, Cash Management Services, C&IB Tampines,
Singapore
- 7/ **Mustafa Ali**, Manager Payment Center, Cash Management Services, C&IB Tampines,
Singapore
- 8/ **Loo Suat Leng**, IS Manager, Tampines, Singapore
- 9/ **John Dick**, Product Manager, UK Clearing Services, C&IB, SCB, London
England
- 10/ **Andrew Hazen**, Relationship Manager SWIFT, Singapore
- 11/ **Chia Wei Hong**, Senior Manager, Cash Mgt and Custody SCB C&IB, Singapore
- 12 / **David Faulkner** , Head Product Management ,C&IB Singapore
- 13 / **Hsu TP**, Service Delivery, Hong Kong

14/ **Daniel Tan** Head Network Services Division, C&IB, Singapore

15/ **Michael Teo**, Head Cash Management & E.B. Services, Singapore

16/ **Beng Hua Lim**, Product Manager Product Management, C&IB Singapore

17/ **Yadev Shalini**, Associate Product Manager, Product Management, C&IB Singapore

18/ **Gavin McMaster**, Channel Manager, Electronic Delivery, C&IB London

19/ **Jacqui Clarke** Technical Business Solutions C&IB London

20/ **Eric Kin Wa Lo** IS Manager, C&IB, Hong Kong

ANNEX C

SWIFT – Current Process

Notes relating to Discussion Paper

SWIFT – the Society for Worldwide Interbank Financial Telecommunication is a bank-owned co-operative serving the financial community worldwide. The S.W.I.F.T. Transport Network (STN) is a dedicated global network for secure communication between S.W.I.F.T. customers. S.W.I.F.T. supports the financial data

communication and processing needs of financial institutions, through a range of financial messaging services and value-added processing, as well as access through the STN and interface and application software.

FIN is SWIFT's core-and-forward storage message-processing service used by all members operating in S.W.I.F.T. It enables financial institutions to exchange financial data worldwide securely, rapidly and reliably.

The user's access to the system is through a physical point of contact with S.W.I.F.T. via a computer-based terminal (CBT). The main characteristic of a CBT is that its hardware and software configuration allows communication with the S.W.I.F.T. system. Further information on this can be found in the S.W.I.F.T. User Handbook, FIN Service Description.

A large amount of our total S.W.I.F.T. traffic is routed through London, New York, Africa and the Middle East as well as Asia. S.W.I.F.T. covers all of our major businesses – Payments, Trade, Treasury and Securities (i.e. Custody). Also a number of major clearing systems, such as the EBA, CHAPS Euro and the future NEW CHAPS operate using S.W.I.F.T. The new CHIPS Finality system will also use S.W.I.F.T., as will the new RTGS-Plus system in Germany. Many of the World's larger clearing systems use S.W.I.F.T. as their engine.

SWIFT use BIC Codes (Business Identifier Codes) for all branches of banks connected to the system, i.e. from a centralized location, to communicate with. BIC Codes are standard throughout the world and easily recognizable. Each BIC address is primarily made up of 8 characters that are mandatory, covering the bank code, country code and location code. It is made up as follows:

Bank (Financial Institution) Code	4 Characters	e.g. SCBL
Country Code	2 Characters	e.g. GB
Location Code	2 Characters	e.g. 2L

At present SCB have 43 connections, although the numbers will grow with the acquisition of Grindlays –

messaging systems are centralized so already providing economies of scale.

SWIFT. is used primarily in two ways - either as the engine for a market infrastructure initiative, such as clearing systems (e.g. CHAPS Euro/TARGET, the EBA) or as a means of communication between banks within and across borders. Only banks deal in payments across borders, corporates rely on their banks for the desired result. S.W.I.F.T. is purely a bank-to-bank operation - it does not involve any corporate customers, unless they have treasury access to the system. It is the quickest, easiest and cheapest way for banks to communicate with each other using Standards that everyone is familiar with. Receiving a message via S.W.I.F.T. means that you know you are receiving a bona-fide message.

The Top 20 Financial Institutions that we communicate with using S.W.I.F.T. are among the world's largest Financial Institutions (on the whole - Traffic Watch will support this). As regards S.W.I.F.T. messaging out of the Bank, we connect to S.W.I.F.T. Access Points (SAP) through message system gateways/interfaces such as FASTWIRE and SCSTAR. SWIFTAlliance, a state of the art service that will provide access to the new SWIFTNet next generation of services, is replacing FASTWIRE. SCSTAR will also have this connectivity available.

The total volume of SWIFT. messages covers all category types, as many as 170 different message types are sent or received by branches in their operations worldwide. These will include information messages, the exchange of bilateral keys for example, and other non-payment message types. S.W.I.F.T. costs will take account of these messages, and will not relate purely to S.W.I.F.T. payment volumes. Notice should also be taken of the different channels used, e.g. a payment message between London and New York is much cheaper than a payment message between Hong Kong and Singapore or London and Singapore. There are also surcharges on top, that can be applied to each message if required.

The SWIFT. System processes information in the form of messages. From the user's point of view, these messages are sent either:

- 1/ from one user to another (e.g. normal banking messages such as a customer transfer - payment);
- 2/ from a user to the system (e.g. requests for information such as a retrieval request); or
- 3/ from the system to a user (e.g. responses to requests).

So there are three main types of S.W.I.F.T. message:

- 1/ System Messages (MT category 0) relating to sending and receiving messages (e.g. user-to-S.W.I.F.T. message, Delivery Notification, Retrievals), or to some aspect of a user's logical terminal or destination (e.g. LT History Request, Redefinition of Delivery Subsets).
- 2/ User-to-User Messages (MT categories 1-9) enabling users to perform financial transactions.
- 3/ Service Messages (or Control Messages) relating to system commands (such as LOGIN) or to acknowledgements (e.g. ACK, SNK, UAK).

SWIFT. charges on a message by message basis, that is one sheet at a time. Statement messages, i.e. a MT950 statement, may involve several pages – S.W.I.F.T. will charge for each page, irrespective of the length of the message. It is irrelevant to S.W.I.F.T. what the value contained in each message is if any. A S.W.I.F.T. MT199 or MT299 message, for instance involves no value whatsoever. SWIFT MT940 and MT950 statement messages are exactly that – they are bank statements – not value messages.

The costing of SWIFT. messages is simple – it is by message and by the route of the message. Other costs relate to other services that we as a Bank need in the performance of our daily ongoing business. When determining S.W.I.F.T. traffic, it should be realised that value amounts have no bearing on the pricing of the message – the value of the message is not priced or an issue. It is a simple price of volume – nothing else.

SWIFT is currently the only major way across borders that banks can communicate on a regular standard basis. S.W.I.F.T. is all about STANDARDS. All banks know that when they communicate by S.W.I.F.T. they will receive a standard acknowledgement and know that the counterparty will act on the instruction. It is an industry standard adopted by all of the world's major banks. The S.W.I.F.T. system is the major means by which Standard Chartered Bank moves money around its network. It is the only means available electronically to settle large transactions across borders. Any large acquisition involving Money transfer will ONLY go via S.W.I.F.T.

SWIFT recognizes the e-world, which is why SWIFTNet is being introduced. It will be used initially by CLS, but it will also be taken on by the new German clearing system RTGS-Plus and NEW CHAPS, the new

sterling CHAPS payment system. The existing SWIFTFIN service will continue for sometime yet, but SWIFTNet, primarily to retain order, stability and standards in the market will gradually replace it over time.

At this year's SIBOS 2000 , S.W.I.F.T. and IDENTRUS announced that they would be working in-partnership for the benefit and future of e-business in financial messaging systems, whether payments, trade, treasury or securities. S.W.I.F.T. also announced two new products TrustAct and ePayments that will support its continuing move into the eWorld.

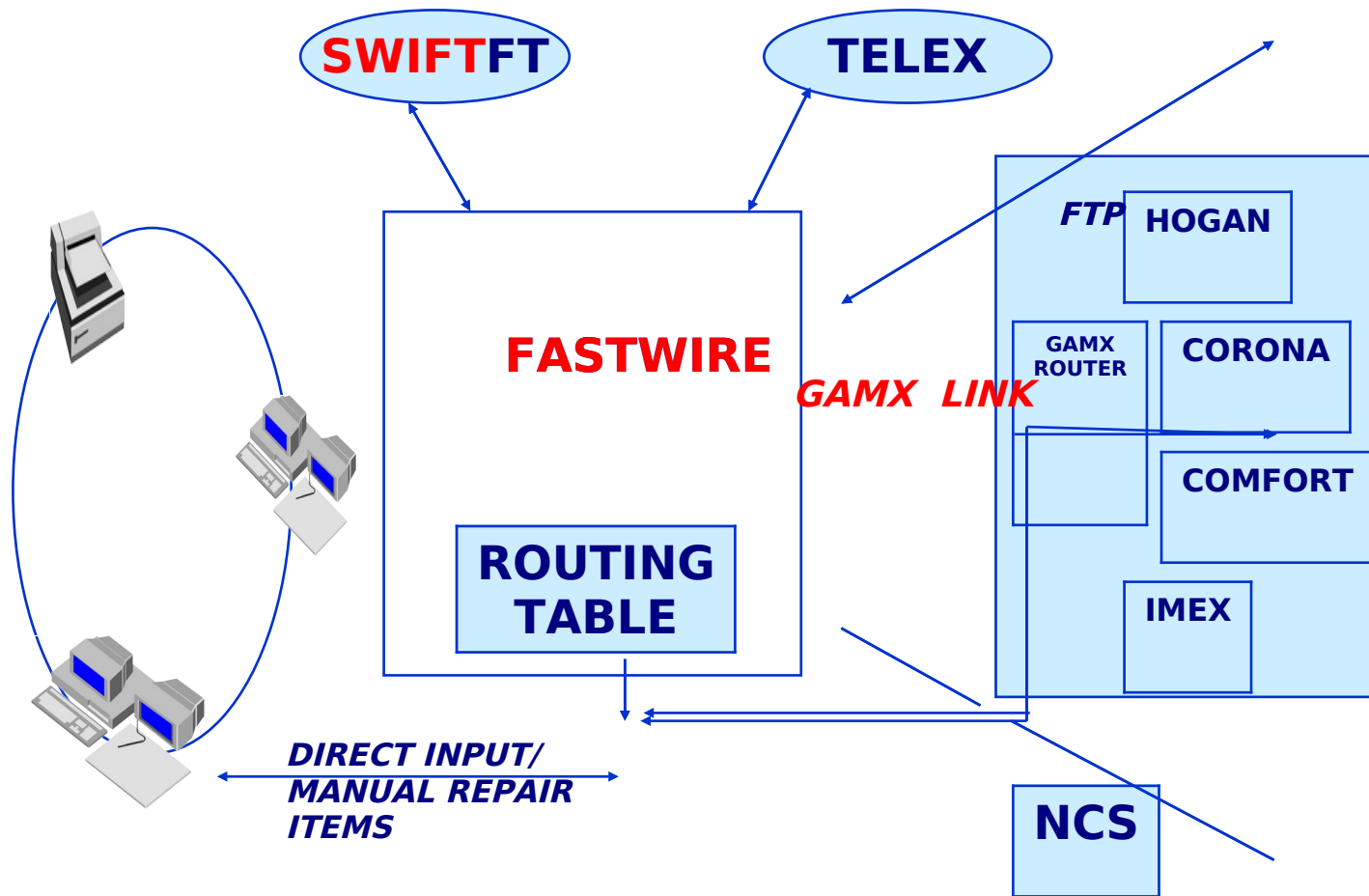
SWIFT is owned by the banks and is non-profit making. Any initiatives are driven by and for the banks. All decisions are made by a Board of Directors filled with bankers (outside of the executive involved in the running of S.W.I.F.T.). Nothing that S.W.I.F.T. decides is done Without the banks full support.

SWIFT is Standard Chartered Bank's major delivery channel for moving moneys between banks, whether domestically or cross-border. S.W.I.F.T. only functions between banks. Corporates are not involved, but if the bank is asked to make a payment (outside of any clearing system), those payments will almost invariable go via S.W.I.F.T. EB only provides the means to deliver the payment instruction to the bank - the actual payment will go via the appropriate means available, either local clearing or S.W.I.F.T. (which covers a number of local clearing operations).

***NOTE: Prepared by John Dick** Product Manager, UK Clearing Services, C&IB,
SCB London 21 Sept 2000*

PROCESS FLOW SWIFT Per SINGAPORE

PEGASUS

**USER DEPTS****SWIFT GATEWAY****BACK END SYSTEMS****ANNEX F PROCESS FLOW INWARD SWIFT example Hong Kong**

Extern	Systems in the Bank	Message Types	User Dept	Special Notes
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al										
SWIFT	FASTWIRE (VAX)	Hardcopy				100-299 for specific customers	Custody	Provides Cash Management for State Street		
						210	Custody	Provides Pre-Advice of fund to ARMs. As MT210 are not processed by CMS.		
						500-599 (exclude 520-523)	Custody	NCS can only handle MT520-523		
		Mainframe	GAMX	Mainframe	IMEX	100 (Conditions match in Reference Field 21), 202 (Conditions match in Reference Field 21), 400-499, 700-799, 940,942,950	Trade Services			
					HOGAN Payment	100-104, 200, 202-204, 210			Payment Centre, CMS	
					COMFORT	300-399			Treasury	
					CORONA	940,942,950			Treasury	
				Midrange	NCS	520-523	Custody			
				Midrange	GMIS				100-999	Customer Services, CMS
		PC	MESVP	PC	SMTSS	940,942,950 with Currency = USD	Trade Services	To speed up the reconciliation of customer balance. Reimbursement can be shorten by one day. This increase the competition of Trade Services provides by the Bank.		

XXX = Bank's application

ANNEX F PROCESS FLOW OUTWARD SWIFT example Hong Kong

User Dept.	Message Type	Systems in the Bank					External	Special Notes	
Payment Centre, CMS	• 100-104, • 200, 202-204, • 210 • 910	Mainframe	HOGAN Payment			Mainframe	GAMX	FASTWIRE (VAX)	SWIFT
	• 940, 942, 950		HOGAN CAS						
Trade Services	• 100, • 202, • 400-499, • 700-799		IMEX						
Electronic Banking	• 520-523, • 553, • 561, • 571-573, • 592, • 595,599	Midrange	VISTA	Mainframe	BOI	PC	FRAS		
Custody	• 500-599		NCS						
Trade Services	• 100 • 202, 203 • 400-499 • 700-799		KAPITI						
Treasury	• 300-399		PEGASUS						
Customer Services, CMS	• 195, 199 • 295, 299 • 999		GMIS						
All Dept.	• X99	Manual Input						• Using SWIFT Code SCB Financial Institutional	

XXX = Bank's application

ANNEX G**SWIFT IN and SWIFT OUT****FROM TP Hsu Lotus Notes 21 Sept 20000****Hong Kong****To:** Gordon Jenkins/CB/StanChart@StanChart**cc:** Scott Spanton/FIN/StanChart@StanChart**Subject:** Re: Channel - SWIFT

Gordon,

Thank you for the paper. I have several points for your comments.

- 1.1 Product cost = Channel Cost + Processing Cost (there are other costs such as sales, marketing, customer services ...etc.) whereas

'Channel' can be Internet, Proprietary, H2H, Fax, Branch or SWIFT; the 'Processing' components can be Hogan, Manpower, or SWIFT.

The Channel's SWIFT is different from Processing's SWIFT in terms of (my) definition though the 'SWIFT' here is processed under the same system.

I see the definition of Channel is the means to have **direct contact with ordering customer** (not recipient customer).

- 1.2 Services Delivery (Rob Edwards and Suet Hoon) always treat the Channel and Processing as the same because they focus on System (ie. end to end), hence, the Channel's SWIFT and Processing's SWIFT are of no difference to them.

2. Is SWIFT a channel ?

2.1 SWIFT-OUT

- 2.1a Cash Payment - cross-border (eg. MT100)

Ordering customer can send in their instructions electronically via Vista, IPS, or manually via branch or PSB. These are channels.

Once the instruction goes into SCB, it can be processed via Hogan, and then be further PROCESSED by SWIFT or Telex or Bank

Draft depending on the instructions but the SWIFT/Telex/Bank Draft here is 'Processing'. So here SWIFT is not a channel.

2.1b Cash Payment (local).

Same as 2.1a. Take Outward Local Bank Transfer as example. I do not agree with Suet Hoon that it is a channel because customer instructs us via paper or some EB products. OLT is a product NOT a channel. It consists of Channel (STS, Vista, In-SWIFT, branch) and Processing (Hogan, CHATS/MEPS).

2.1c Cash Reporting (eg. MT900, 910, 940, 950)

It is a channel here (though it is a bit off with my definition - ordering customer). Customer can choose to have report by other channels, eg. Telex, Fax, Internet in future. However, I think our focus here is not for Reporting. On the other hand, I would like Services Delivery and Business Finance to consider Reporting as a separate product.

2.1d Trade Instructions (eg. MT700, advising LC to beneficiary bank or corresponding bank).

Again, SWIFT is just part of the processing here, hence it is not a channel.

2.1e Custody Instructions (eg. MT52x. very few transactions)

Same as 2.1a.

2.2 SWIFT-IN

2.2a Cash Clearing - cross border (eg. MT100)

Here, I see the ordering customer is the Sending Bank though the instruction maybe given by an unknown corporation overseas. The Sending Bank can choose other banks or SCB with SWIFT as the sole channel (almost). There is cost/service differentials offered by different banks. SCB can offer clearing services better/cheaper than our competitor through 'rebate', 'soft-dollar bonus', and Fees can also be different due to the STP rate.

I see SWIFT is a channel to Cash Clearing product even though it is the sole channel.

2.2b Cash Clearing - inward local bank transfer

Local payment and clearing seldom use SWIFT. The Ordering Bank (as per instruction by their customer) delivers instruction to us via MEPS / CHATS. Here, the MEPS/CHATS are channels (electronic).

2.2c Trade Instructions (eg. MT700 received from other banks).
Same as 2.2a. Here the ordering bank can choose among our local competitor although SWIFT is almost the only channel.

2.2d Custody Instructions (eg. MT53x)
Same as 2.2c. (Though some instructions are come from Vista, the volume is relatively low)

In a practical point of view, if $\text{Product cost} = \text{Channel cost} + \text{Processing cost}$, when there is only one channel available, we can ignore the Channel factor with $\text{Product cost} = \text{Processing cost}$, say, for those inward instructions from bank (SWIFT-IN) cases. There is hardly any other channels to replace SWIFT at this moment.

However, I still think that we should be consistent when working on the Product relationship with Channel and Processing, that is to separate these 2 components even though in the SWIFT-IN. This definition can help people to realize the difference between channel and processing (service delivery). In addition, it will be useful (not far away) when Internet becomes Channel among banks. (There are several Internet payment/collection products under development.) My view is SWIFT-In is a channel, and SWIFT-Out is not.

Regards,
Tp